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Reviews the literature for the three-year period, October 1946 thru September 1949. Volume XVII, No. 2, April 1947, covers the previous three-year period.

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This issue of the REVIEW was prepared by the
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FOREWORD

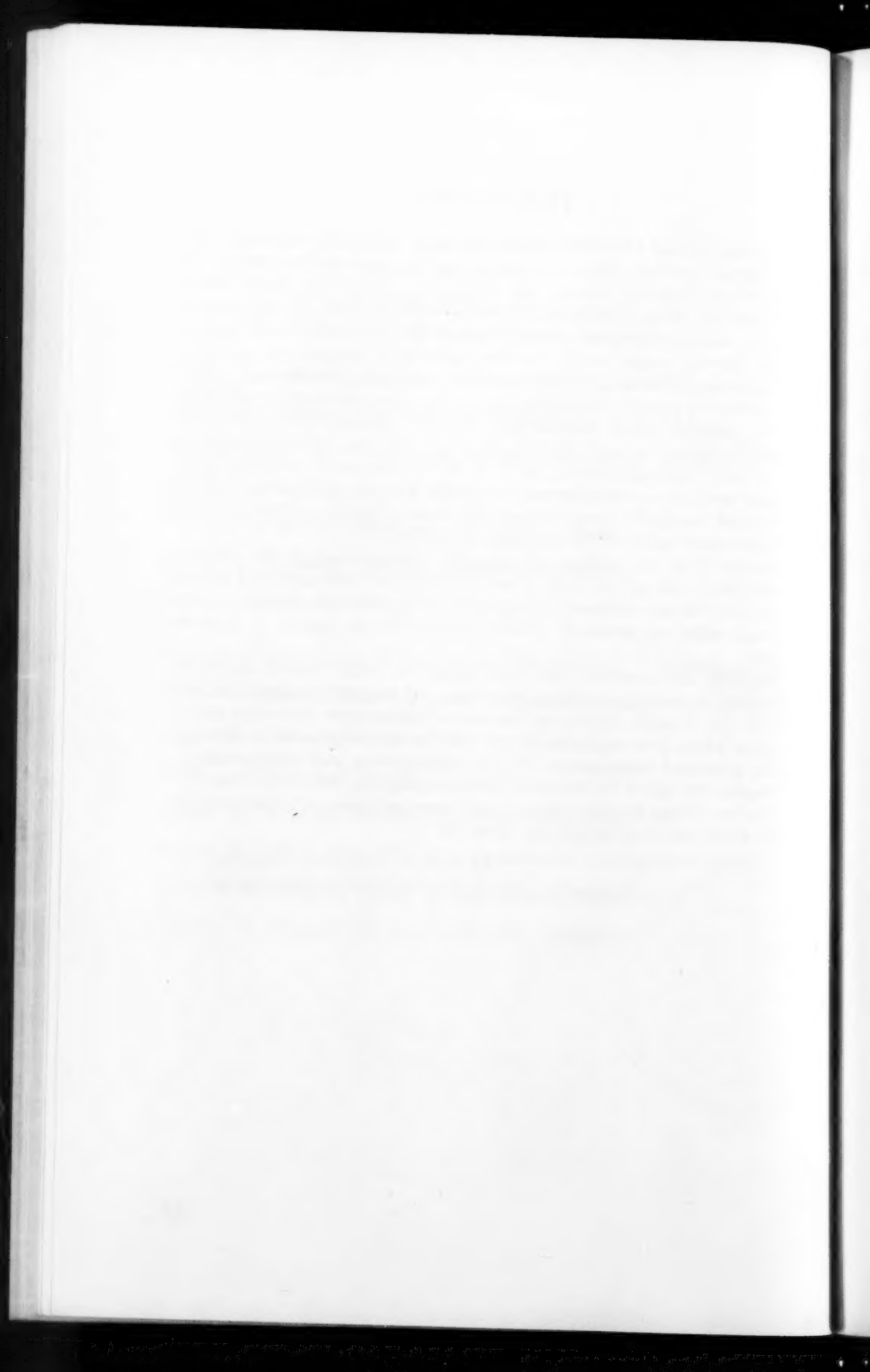
THIS issue of the REVIEW is somewhat more compactly organized than were the six previous issues on finance and business administration. The chapters are fewer in number, tho in general context they follow topics of the earlier issues. Such consolidation is justified chiefly on the grounds that the volume of genuine research during the three-year period covered by this REVIEW would hardly produce meaningful chapters on narrowly defined topics. It is to be noted, moreover, that there is a continuing need for developing meaningful generalities by the observation of broad trends in the field of school finance and business administration. For that matter, literature in the field is dealing less and less with fragments or bits of only local significance. Several studies reported in this brief mid-century span, not to mention many statewide surveys not reported, exhibit a balanced, insightful grasp of fiscal problems of public education which indicates some maturity of both science and practice.

Chapter I on the support of education covers most of the research classifiable in the general field of school finance on both state and federal levels. Only the special topic of district reorganization was thought to have received sufficient attention among researchers to justify a separate chapter.

Similarly, all aspects of the local system of fiscal control—planning, budgeting, accounting, auditing, reporting—are treated in a single chapter, Chapter IV. A single chapter on business administration eliminates special chapters which have appeared in the past on such topics as credit regulation, personnel management, income management, and transportation.

Despite this effort to condense, there remains in this issue some unavoidable overlap between chapters and some inclusion of bibliographical items which are only marginally research.

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CHAPTER I

Support of Education

ARVID J. BURKE and EDGAR L. MORPHET

THE effects of postwar inflation upon educational institutions have stimulated research in school support. The Research Division of the National Education Association (48, 49) has continued to report developments in the various states. In a report of the Council of State Governments, Chase and Morphet (10) summarized the status of school finance in 1948. Studies of school finance also were made in about one-fourth of the states between 1946 and 1949. These are reviewed only if they contain an approach, innovation, technic, or finding which may be of general significance.

Economic Basis of Support

The most striking proposal during this period on the subject of the economic basis for education was made by Cox (12). She advanced the thesis that education should be supported by long-term private, personal credit insured by government for all young people aged ten to twenty-four. The evidence to support this thesis and its implications merits consideration by research workers. It is conceivable that a system of support could be worked out in which increasing use might be made of credit as persons approach maturity and enter upon advanced preparation for specific vocations.

Dewhurst and associates (14) surveyed the economic potential of the United States to provide the goods and services, including public education, required by its people. The report contains a wealth of material basic to a comprehension of the economic ability of the nation to provide an adequate level of education for all. Several regional studies such as that of the State Education Commission in North Carolina related school support to the resources of the state (54).

Local Revenues for Public Schools

Local property tax support for public education continued to decline in importance (10, 48). Property assessments have been slow to adjust to changed monetary values (25). Few restrictions placed upon local property taxes for schools during the depression have been removed (10, 51). Investigators in Illinois (21) and New York (52) questioned whether these developments should not be arrested and proposed ways to rehabilitate local property tax support. Kendrick and Strevell (25) demonstrated that the yield of the property tax could be increased greatly and proposed

needed reforms. The Committee on Tax Education and School Finance of the National Education Association took a similar position (45). Harris (18) pointed out the inelasticity of the property tax base for meeting inflation, but concluded that its yield could be increased. Burke (3) traced the history of local property tax support in the state of New York in relation to economic trends. Moffitt (32) studied state restrictions and limitations upon local support for schools.

Research is needed upon such questions as these: Has the property tax base been less elastic during the present inflationary period? If so, what are the causes? What are the obstacles to property tax reform? How have certain states and localities successfully overcome these obstacles? What happens to public school revenues in a period of falling incomes and prices where the local property tax has become a relatively minor source of public school revenues?

Local nonproperty taxes have shown a phenomenal growth in recent years (57), but school districts generally have been reluctant to take advantage of them. The New York law permitting counties to levy such taxes for educational purposes was appraised by the Educational Conference Board (52). It proposed methods of integrating such taxes into a sound school finance program. Walker and Cocking (74) studied the potential yield of local nonproperty taxes in the state of New York. The Pennsylvania law granting increased local taxing powers to school districts was attacked by Reller (60). Burkhead (5) studied the effects of the Pennsylvania experience and appraised the experiment against seven criteria. In a symposium sponsored by the Tax Institute (67) Gray presented the case for the Pennsylvania law; Johnson and Boles summarized the case against such taxes; and Maxwell and Glander, while recognizing the limitations, concluded that they would continue to make some use of local nonproperty taxes in a revenue system.

A thoro appraisal of the Pennsylvania experience is needed. We have little research on this relatively new development. What types of taxes can be successfully and economically administered by school districts? How can these be integrated with the federal and state tax structures? How can they be fitted into a sound over-all school finance plan?

State Revenues for Public Schools

Both the amount and the proportion of public school revenues derived from state taxes have increased greatly since 1946 (4). The continued abandonment of earmarked state taxes for schools has made schools more dependent upon the total state tax system (10). State tax support for schools has risen more than have state tax collections (55). The relative burden of state and local taxation for schools, nevertheless, has decreased because of the rapid rise in income (10).

Research in school finance has dealt more with apportionment problems than it has with sources of state school revenues. The National Edu-

cation Association (49) and the Council of State Governments (10) have summarized recent developments in state revenues for schools. Norton and Burke (55) showed the potentialities of increasing state tax revenues for schools. Harris (18) pointed out some of the shortcomings and limitations of state taxes for schools. The State Education Commission in North Carolina, among other state survey agencies, analyzed the tax base and tax effort for the support of schools (54).

The fact that the state has moved ahead of local government as a taxing unit has increased the problems of state and local tax coordination and relationships. The Council of State Governments studied the problem from the viewpoint of the states (11). Mott (42) and a New York joint committee (52, 53) stressed the home rule aspects of the problem.

The Federal Government and the Support of Education

The effects of heavy federal taxes (and the nature of the federal tax structure) upon state and local support of schools received little attention in educational research from 1946 to 1949. Harris (18) showed the effects upon support for private colleges and universities. The Hoover Commission (69) and the United States Treasury Department (73) issued reports on federal-state relations, the latter stressing tax coordination.

During the past three years there have been no new types of data on the need for federal support for schools. Data gathered by the Council of State Governments (10) showed that differentials in ability among states are still extreme. Norton (44) found the same tendency in expenditure levels for schools. The National Education Association (43) summarized existing data on the need for federal aid for schools. Quattlebaum (58) made a careful analysis of all issues involved, gave digests of reports and studies, and enumerated arguments for and against federal aid. The Hoover Commission (70) reviewed federal activities in education and examined their effects upon states. Johnson (24) made a very thoro study of equalization formulas with special reference to federal grants. Simpson (62) urged the states to make greater effort to solve some of their own problems and stressed that even if all states established the best possible program, federal aid would be needed.

The question of federal aid for schools as related to the possible dangers of federal control continued to receive attention. Fuller (15) suggested practical ways of avoiding undesirable federal controls. Reavis (59) proposed safeguards and criteria that should be observed.

Support for Higher Education

Chamberlain (7) and Hoff (19) studied fees in colleges and universities. Harris (18) showed the limitations of endowments and the effects of raising fees. Hungate (20) reported the trends in support for higher

education. Studenski and Baikie (66) studied the financing of higher education in the various states with special reference to New York. Stewart and Lyon (64) centered attention upon the financing of capital outlays in state colleges and universities. The President's Commission on Higher Education (72) analyzed the financial difficulties of institutions of higher learning, made estimates of future requirements, and recommended a program of support for the future. It concluded that local public support probably would not increase very much, that state support would not increase enough to meet the needs, and that substantial federal support would be required. Further analysis of literature on higher education from the point of view of costs appears in Chapter III of this issue.

Policy and Direction in Public School Finance

The inadequacies of local support in many states and the increased proportion of state support have centered attention upon fundamental policy and direction in school finance. The Council of State Governments study (10) showed that most states are pursuing conflicting policies, that practices are not always leading in the same direction, and that improvements are possible in all states. The many studies that have been made in individual states indicated the growing concern over school support policy. Recent legislation in many states represented some rather fundamental changes in policy growing out of such research. The National Education Association summarized school finance goals (47).

A joint committee of the New York State Educational Conference Board and the Public Education Association of New York City (52, 53) reviewed the major policy issues in public school finance with special reference to the state of New York. The NEA Committee on Tax Education and School Finance (45) summarized the principles upon which a group of school finance specialists were in substantial agreement. The Council of State Governments (10) proposed desirable changes in present state finance practices. The American Association of School Administrators (1) summarized some needed developments. Morphet (35) listed what he considered to be the major issues in school finance. Cocking and Morphet (8) suggested essential improvements in school finance. Liggitt (26) emphasized the preserving of community control over public educational policy. Dawson (13) analyzed the problem from the point of view of rural education. Covert (71) summarized the features of a satisfactory school finance plan based upon current practice.

State Foundation Programs as a Basis for Public School Finance

Since most states seem to be moving toward the development of some type of foundation program as a basis for school finance this area has continued to receive considerable attention. Chase and Morphet (10)

showed that while approximately forty states had established some type of foundation or equalization program, either the funds are too limited or the bases used are too unsatisfactory in at least half of these states for the program to be of much significance. In several states the funds are apportioned on subjective bases or in terms of approved budgets. This study also showed that practically all states apportion some funds on a flat grant basis, regardless of need, and that nearly two-thirds of them apportion at least 50 percent of all funds on this basis.

The NEA Research Division published an analysis of state foundation program laws for the year 1947 (50). The desirable features were summarized in a concluding three-page statement. Mort and Burke (40) made a study of the cost of the foundation program for the state of New York. McLure (30) and Sargent (61) examined the foundation program concept from the viewpoint of educational returns at varying expenditure levels. Woollatt's study (76) also contributed to understanding the cost-quality relationship. McLure (31) discussed new methods for measuring costs of foundation programs. Pearman (56) suggested a plan for additional stimulation for districts that wish to exceed the minimum program. Several studies, summarized later, deal with special phases. Comprehensive principles and criteria for a foundation or partnership program of school support have been proposed by the NEA Committee on Tax Education and School Finance (45).

Measuring Need and Costs—the Apportionment of State School Revenues

Chase and Morphet (10) warned against using subjective measures or rough objective measures, such as the school census, that do not accurately gauge the needs. They pointed out the advantages of the classroom unit measure and, under some circumstances, of the weighted pupil measure. The NEA Committee on Tax Education and School Finance (45) recommended both of these measures. Both reports warned against relying entirely on present practice as a criterion, which may discriminate against elementary schools or tend to perpetuate small nonisolated schools and districts. In all studies, including the state studies, much greater emphasis than previously has been placed on developing special adjustments only for objectively defined isolated small schools. McLure (29) proposed population sparsity as an objective means of attaining the same results. Sargent (61) questioned the assumption that the cost of equivalent educational opportunity may be determined by multiplying average practice with respect to pupil-teacher ratios by a constant cost factor. He proposed that the foundation program be stated in terms of educational services, expressed as weighted units of service, and developed a formula for use. The application of this formula was illustrated in terms of the situation in New Hampshire.

Mort and Schmidt (41) summarized recent developments in the technics of apportionment. Morphet (34) explained the technic developed in Florida for determining instruction or classroom units and teachers' salaries; Morphet and Johns (38) explained the plan used for determining units for kindergartens and junior colleges; and Morphet and Messer (39) the plan for incorporating vocational education as a part of the foundation program. Cornell (9) developed a generalized mathematical synthesis of apportionment patterns for federal and state grants showing algebraically the similarities and differences among more important types. The analysis was intended to permit determination of characteristics of apportionment methods without numerical computation.

Johns (22) discussed a plan, which is essentially a refinement of the plan developed in Alabama and Florida, for measuring transportation need primarily on the basis of density of transported pupil population.

Wochner and Miller (75) analyzed developments in equalization, indicated that some states had rewarded small inefficient schools or districts by making special adjustments for all such schools, and pointed out that special adjustments for transportation and for state aid in general should be provided at least chiefly in terms of sparsity of population.

The National Education Association (46) made a study showing that about twenty states were using qualifications of teachers as a criterion for the distribution of state school funds and recommended that this procedure be carefully studied by all states. Morphet (37) discouraged the use of state teachers' salary schedules, as such, but recommended, with reservations, consideration of qualifications in the apportioning plan. The NEA Committee on Tax Education and School Finance (45) questioned the practice and recommended minimum use of earmarked programs.

Financing Capital Outlays

Altho only about a dozen states have thus far developed any comprehensive plan for financing capital outlay in the state program, several studies show the urgent need for such a program in all states.

The Council of State Government's study (10) summarized the present status and recommended that all states face this problem. The American Association of School Administrators (2) suggested factors to be considered and also pointed to the need for state support for buildings. Hamon (17) estimated the total need, showed that only a few states have developed a bona fide program, and stressed the need for careful study. Bursch (6) pointed out the need and explained the plan in California which was on an unsatisfactory budget deficit basis. Strevell (65) showed that population sparsity affects unit costs of buildings, a factor which must be recognized in apportioning aid for capital outlays.

Lindman (27) developed an equalized matching formula for administering state support for capital outlay as a separate fund. He also (28)

traced developments in the field, showed the urgent need for state support, and showed how his formula could be used.

Morphet (33) listed some of the problems that must be faced and pointed to the importance of adequate state support. Johns and Morphet (23) explained the plan used in Florida for incorporating support for capital outlays as an integral part of the foundation program.

Measurement of Local Ability To Support Schools

Because of marked variations in local assessment practices in most states and resulting inequities when a uniform tax rate is prescribed for local districts, the problem of measuring local tax effort has received considerable attention during recent years. Covert (71) attributed the adoption of completely state-supported minimum programs to the lack of satisfactory measures of local fiscal capacity. Chase and Morphet (10) stressed the desirability of uniform assessment policies but called attention to the fact that this apparently could not be attained in most states. They suggested, as an alternative, the development and application of uniform ratios. Where that is not done they proposed the development of an objective index of taxpaying ability similar to those used in Alabama and Florida. Several of the state studies, notably Georgia (16), North Carolina (54), South Carolina (63), and Texas (68), explained the plan for developing such an index and proposed that it be used.

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CHAPTER II

Relation of School District Reorganization to Finance and Business Administration

ROE L. JOHNS and EDGAR L. MORPHET

MORE interest concerning the need for district reorganization has been shown during the past three years than ever before. Grieder made approximately the same statement concerning the three-year period preceding the April 1947 issue of the REVIEW. The accelerating interest in district reorganization is shown by the following: The April 1947 REVIEW included references to 17 state surveys and commission reports devoted in whole or in part to district reorganization and four national studies; the present number includes references to 23 state studies and nine national studies; the past three-year period has been one of implementation and achievement in district reorganization; and some aspects of the subject were reviewed by Cooper in the October 1949 issue of the REVIEW.

In 1948 Wochner (59) made a study of reorganization activity and found that 27 states were reorganizing local school units in some degree and that 15 of the states were reorganizing as a result of a formal reorganization act which sets up machinery for doing it. He reported that the number of local administrative units had declined from 117,000 in 1940 to 94,000 in 1948. The Illinois State Advisory Commission (30) reported that the number of districts in Illinois had been reduced from 11,906 in 1946 to 5859 in 1949. By legislative action Florida (25) in 1947 abolished 720 local tax districts and reorganized the state into 67 complete county units with no subdistricts. Texas (56) as a result of legislation enacted by the 1949 Legislature has already eliminated about 1500 small districts and all territory is now in some school district. Idaho (24) has reorganized or partially reorganized 29 of its 44 counties. These recent developments are much more encouraging than were achievements in previous years. Smith (53) made a study of state constitutional and statutory plans for district reorganization between 1938 and 1947. He found that only nine states had set up definite statutory plans for reorganization of districts and that most statutes dealt with the piecemeal consolidation of schools rather than the elimination of the evils of the small district.

Evidently no new insights into the problems of district reorganization have been developed in research produced during the period covered by this number. This period has seen the application and adaptation of the findings of research of previous years more than the production of new approaches. The trend toward application of the findings of research may be more encouraging than the production of quantities of new research which does not find its way into educational practice.

Development of Criteria for District Reorganization

Criteria for district reorganization have been applied extensively during recent years. No new criteria have emerged during the past three years but those developed in previous years have been applied more widely. The criteria applied usually have included statements concerning the reorganization of attendance areas as well as administrative districts. The Georgia survey (1), the New Mexico survey (6), and the South Carolina survey (7), the Spartanburg survey (8), the California State Commission (14), the Wisconsin State Department of Education (15), Carpenter (16, 17), Chisholm and Henzlik (21, 28), Gregg (27), the Indiana survey (31), Kulp (33), Lobaugh (34), the Minnesota Institute of Governmental Research (39), the Montana Education Association (41), the National Commission on School District Reorganization (43, 44), the National Education Association (47), the North Carolina survey (48), Reusser (51), Sumption and Beem (54), and Taylor (55) all presented criteria for the reorganization of school districts. The criteria in these reports were on the whole similar to those recommended by the National Commission on School District Reorganization (43), which, summarized briefly, were as follows: (a) a minimum of at least 1200 pupils—per-pupil costs decline up to 10,000 pupils, and if the number of pupils is considerably less an intermediate district is necessary to provide supervision, guidance, transportation, and junior college offerings; (b) each teacher qualified to do a particular job well—one or more teachers for each grade or subject and a qualified central staff of administrators, supervisors, and clerks; (c) one or more elementary schools, at least one high school, and where possible a junior college; (d) at least one teacher per grade for each elementary school; (e) not fewer than 75 pupils per grade and not fewer than 12 teachers for each high school; (f) each elementary school to serve a neighborhood or small community and each high school a larger community.

There were, however, some basic departures from the criteria recommended by the National Commission (43). Some studies recommended the inclusion of the assessed valuation or wealth of the local district as a criterion. Among those who recommended that criterion were the following: the Wisconsin State Department of Education (15), Carpenter (17), the Montana Education Association (41), the National Education Association (47), Reusser (51), and Taylor (55). The National Education Association (46) stated that each basic school administrative unit should be large enough to include "adequate financial resources to meet its share of the cost of the foundation program," and the Montana Education Association (41) stated that "taxable wealth should be high enough in the new district to bear at least three-fourths of the educational cost." Recommendations of this type seem to disregard the equalizing potential of the state's plan of financing. With reference to the district organization problem, the most promising trend in state support, as reported by the Committee on Tax

Education and School Finance (45) and the Council of State Governments (22), is the equalization or foundation program plan. A comprehensive equalization plan of state support gives due consideration to the relative taxpaying ability of local school districts in distributing state funds. Under such a plan, the taxable wealth of a local district should not prevent an area from becoming a good district if it meets other acceptable criteria. It is suggested that research in school financing be given due consideration when studying the problem of district reorganization.

There seems to be division concerning the criterion relating to size of the administrative unit, especially as it relates to the community. Chase (27) analyzed the advantages and disadvantages of the community as the administrative unit and concluded that substantially every advantage that has been claimed for the community administrative unit can be obtained within the larger district, provided each community center is given a school which can meet community needs. He warned that if community administrative units were adopted, sooner or later a need would develop for an intermediate unit superimposed upon community units to provide services they could not afford. Chambers (18) also recommended the larger unit such as the county and stated that the nation needs no more than 5000 districts whereas it has in excess of 100,000. The county unit or a modified county unit system of district organization was recommended in the Georgia survey (1), the New Mexico survey (6), the South Carolina survey (7), the Indiana survey (31), and the North Carolina survey (48). On the other hand, smaller administrative units supplemented by intermediate units were recommended by Butterworth (9, 10, 11), and Carpenter (16, 17). Henzlik and Chisholm (28) recommended the community administrative unit. The National Commission on School District Reorganization (44) indicated the necessity of intermediate units if a district has considerably less than 10,000 pupils. Somewhat out of harmony with the national trends was the recommendation of the Massachusetts Special Commission (38) for the establishment of regional high schools to serve two or more towns. This recommendation involved the superimposing of a high-school district upon elementary districts. All other studies included in this review which treated the subject recommended unified districts including all grades.

How To Achieve District Reorganization

Much emphasis has recently been given to developing ways and means to initiate school district reorganization. The evidence now available seems to indicate that the initiative for school district reorganization must come largely from the state but that local school units have a vital part to play in the reorganization process. The reorganization procedure recommended by the National Commission on School District Reorganization (43) has met with the most common acceptance. The Commission (44) recommended: (a) a state commission to furnish leadership in school district

reorganization; (b) county or local committees to conduct surveys and present reorganization plans to the state commission for approval in accordance with sound criteria; (c) public hearings and a majority vote of the area concerned or action by the legislature for putting the plans into effect. Authorities are generally agreed that the state has the constitutional authority and the responsibility to determine its school administrative districts, but most authorities believe that the people of the local units should participate directly in the reorganization process. Breckner (5), the California Commission on School Districts (12, 13, 14), Callahan (15), Chase (19), Henzlik and Chisholm (21, 28), the Council of State Governments (22), Dean (24), Geyer (26), Gregg (27), the Illinois State Advisory Commission (30), Kulp (33), Lobaugh (34), Mulford (42), the National Education Association (47), Reed (50), Reusser (51), Smith (53), Wheeler (58), and Wochner (59) either recommended plans for initiating school district reorganization similar to the plan recommended by the National Commission on School District Reorganization (44) or reported on the progress of the operation of such plans.

State Financial Policies Affecting District Reorganization

The relationship of state financial policies to the problem of district organization has properly been receiving increasing attention during recent years. However, there has been no adequate study of this important matter in many states in which the evidence indicates that certain financial policies are tending to retard or even practically to prevent needed reorganization of school districts or consolidation of schools.

The California Commission on School Districts (13), after showing that the present district organization not only is expensive but also creates inequalities and threatens local control, concluded that "existing state policy governing the apportionment of the state school fund retards reorganization of school districts in California."

The National Education Association Committee on Tax Education and School Finance (45) concluded that maximum benefits of an adequately financed foundation program will not be realized unless local school government is a vital functioning part of the educational structure and also called attention to the fact that the state is responsible for creating a pattern of local school district organization which can assume and discharge its proper responsibilities.

Several recent reports of state studies, especially those for South Carolina (7), New Mexico (6), Indiana (31), North Carolina (48), New Hampshire (52), and Texas (56), have called attention to provisions in the state aid law that tend to encourage the perpetuation of small districts or schools by providing extra rewards that cannot be defended. In such instances one aspect of state policy is tending to prevent what a more important aspect of state policy seems to be trying to encourage.

Reller, in the *Annals of the American Academy of Political and Social*

Science (2), concluded that it is to be regretted that as states have increased the funds provided for education they have not simultaneously stepped up the local structure so the funds could lead to the achievement of more significant results.

The National Commission on School District Reorganization (44) called attention to the fact that one of the most important elements in the reorganization of local school units is the financing of schools. The commission listed several factors that might either accelerate or retard the organization of adequate local school units and concluded that the proper organization of local school systems must be an objective of the state, fortified by its system of school finance, which should provide distinctly and specifically for assuring that all essential costs can be met including instruction, transportation, and capital outlay.

Chase and Morphet (22) found that states listed more factors in their state programs that discouraged reorganization than factors that encouraged needed reorganization. They pointed out six conditions in state policy that seemed to be essential to encourage reorganization and called attention to the fact that only a few states had met all of these. Even when only one of the conditions has not been met serious handicaps seem to result. They concluded that all states need to examine their policies to see that no unnecessary handicaps to reorganization exist, and that both incentives and guidance are provided for the creation of districts having the ability to provide needed educational programs and services at reasonable cost.

Local School Surveys

Comparatively few local school surveys deal with the problem of district organization as related to finance, probably largely because most of them deal with a specific school district. Some of them consider the problems that may result from the attendance in the district of children from other nearby areas. When a board is studying its own problems or contracting to have them studied, it seldom considers officially the possibility of merging its district with some other district, or even of getting some other districts to merge with it.

In this respect the Survey of the Spartanburg County, South Carolina, Schools (8) constitutes an exception, largely because the study includes an entire county in which there are several districts, and, therefore, necessarily considers the problem of district organization as related to finance and other phases of the program. This report proposed criteria that should be observed in reorganizing the school districts of the county.

The School Building Survey of Pinellas County, Florida, (32) pointed out that the establishment of districts within a county administrative unit for the issuance of bonds hindered the equalization of educational opportunity. The survey recommended, therefore, that county units abolish all special taxing and bonding districts within their borders.

Economy and Efficiency Related to District Organization

Studies made of the relationship of reorganization to economy and efficiency did not always distinguish between reorganization of administrative units and reorganization of attendance areas. However, in states maintaining thousands of one- and two-teacher administrative districts, the major benefits of district reorganization cannot be attained without at the same time consolidating a large number of schools, so, therefore, it is difficult to separate these two problems.

Aderhold (1), Bradshaw (4), Brewton (6, 7), the California Commission on School Districts (12), Dawson (23), Henzlik and Chisholm (28), the Illinois Legislative Council (29), the Minnesota Institute of Government Research (39), Morphet (25), the National Commission on School District Reorganization (44), and the United States Chamber of Commerce (57) concluded that the reorganization of school districts could result in either reducing expenditures or producing better educational returns for the same expenditure. Numerous studies have shown that the per-capita costs of small schools were higher than those of large schools, and Pillsbury (49) made a study in Connecticut which showed that large schools obtained desirable educational objectives more effectively than did small schools. Beach and Gibbs (3) reported that state departments of education could not render services economically or effectively in states with an excessive number of small districts.

McLure (36, 37) and the Montana Committee on Elementary and Secondary School Organization and Finance (40) observed that district reorganization was necessary in Mississippi and Montana before a state equalization plan of financing could be made effective.

The California Commission on School Districts (12), Dean (24), Lobaugh (34), McIntyre (35), and the Montana Education Association (41) presented evidence which indicated that local tax rates could be more nearly equalized by district reorganization.

Needed Research

Important among the problems associated with district reorganization concerning which more adequate research is needed are the following: (a) the effect of state financing programs upon district reorganization; (b) the community versus an aggregation of communities as the basic local school administrative unit; (c) the administrative unit for the administration of junior colleges; (d) the probability that better educational programs have actually been provided in reorganized units.

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CHAPTER III

Educational Costs and Their Analysis

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STUDIES during the period covered by this REVIEW, as in previous years, have analyzed costs against a background of educational purposes and results. Considerable attention has been devoted to problems that may be grouped as: trends of costs, inequalities, effect of teachers' salaries on costs, building needs, educational returns, foundation program costs, comparable units of cost, higher education, and future costs.

Trends of Costs

Several studies have been concerned with trends of school costs. The National Education Association (50) reported in a national inventory of public school finance in 1946-47 that expenditures did not increase enough from 1940 to 1947 to permit schoolboards to hold their own in educational purchasing power. Mort and Burke (48) studied the trends of school costs since 1940 and concluded that educational standards achieved with \$100 per pupil in 1940 required twice this amount in 1947. Burke (10) related the percent increase in teachers' salaries since 1939 to such economic trends as state income, state salaries and wages, minimum salaries of civil service workers, and prices received by farmers and other groups. He pointed out that teachers' salaries have fallen further behind incomes of other groups during this period. Clark (16) observed that the relative income of teachers in February 1949, compared to all other groups, was only 70 percent as good as the prewar status of 1939.

A group of school finance specialists (51) in conference on school finance problems noted the trend toward a smaller, if not completely eliminated, cost differential between grade levels, in both salaries of teaching personnel and pupil-teacher ratios. However, Burke (12) noted that the median salaries of elementary-school teachers in the state of New York increased 61 percent from 1939 to 1949 while the corresponding increase for salaries of high-school teachers was 77 percent.

Inequalities

Current inequalities in financial support have been portrayed in the report of the Council of State Governments (17). Notable inequalities found among states were (a) average per-pupil expenditure in the highest state about four times the average in the lowest state, (b) wide

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variation in preparation of teachers, (c) average annual salaries of teachers ranging from \$3400 downward to less than \$1300, (d) average per-pupil value of school property ranging from \$600 in seven states to less than \$200 in four states, and (e) average per-pupil expenditures for textbooks and teaching supplies varying from eight dollars in seven states to less than two dollars in four states.

Effect of Teachers' Salaries on Cost

The Council of State Governments (17) used the percentage of all teachers receiving \$2400 or more as a better indication of the status of teachers generally, than the average salary of a state. It was noted that insufficient research is being done to analyze the consequent effect upon cost of adequately filling the present gaps in teacher supply, considering proper salaries, sick leave benefits, and retirement provisions. Burke (11) noted that all states have set minimum qualifications for teachers, but few of them have assessed the financial implications of this policy. Baldwin (4) observed that one outcome of the West Virginia state minimum salary schedule was the achievement of more equalization. Haskew (26) proposed a salary bill of rights for teachers to include among other things an income adequate to encourage professional preparation and performance.

School Building Needs

There has been limited research on the underlying factors related to variations in cost of school building needs. However, the literature is replete with observations which may be helpful leads in future studies. Higgins (29) listed five factors affecting building costs: (a) productivity of workmen, (b) availability of materials on the job, (c) percentage of cost devoted to carpentry, (d) building codes and ordinances, and (e) designing. Butterfield (13) proposed the construction of cheaper buildings furnished with useful equipment and designed to serve all pupils as a preferred alternative to utilizing inadequate financial resources for providing expensive buildings which would be poorly equipped and capable of serving but few pupils.

Engelhardt (19) compared cubic-foot costs of buildings constructed before and after the war with additions conforming to existing buildings. In the latter case cubic-foot costs were inflated because alterations were usually included in cost but excluded from cubage estimates. He pointed out that cubic-foot costs may be misleading due to wide variations in scope of work. Bartels (5) developed an index of total cost of school-house construction in the city of Cincinnati based upon indexes of construction cost as related to adjusted interest rates. Pitkin (62) reported that the cost unit (pupil) used for distributing state building aid in Massachusetts means net average membership of pupils residing in each

town regardless of where they attend school. No analysis was made concerning the possible effect of indirectly subsidizing private schools through the adoption of this type of cost unit in a state finance plan.

Holmstedt (35) stated that fiscal needs of school buildings must be analyzed in terms of (a) educational services, (b) community growth and development, (c) character of new population, (d) trends in business and industry, (e) types of workers and level of wages, (f) projection into the future, and (g) financial resources within bond and tax limitations. Johnson (39) cited four basic elements of construction costs: labor, material, design plus supervision, and finance. Holden (32) cited examples of items planned to reduce maintenance cost: washable wainscots, elimination of exposed piping and radiation, built-in storage cabinets, linoleum floors and caul base, reversible sash windows, and terrazzo corridor floor with caul base. Wilson (74) voiced a need for a united front in developing carefully studied needs as a basis of cost analysis.

Cost—Quality Relationships

The Florida Citizens Committee on Education (21) observed that education was more adequate in counties of higher expenditures. However, exceptions were noted in a few counties, due apparently to local efficiencies and inefficiencies in organization and operation. A study by McLure (45) of over 100 representative schools on three expenditure levels in the state of Mississippi revealed significant differences in educational practices generally associated with returns. The study of the National Commission on School District Reorganization (49) pointed out, as others have done, that the cost per pupil is related not only to the size of the school, but also to the quality of its educational offering. Studies of Henzlik and Chisholm (28) showed that the level of pupil achievement, teachers' salaries, teacher preparation, and kind and amount of supplies and equipment were related to the level of per-pupil expenditure. Woollatt (76) analyzed the relationship between educational cost and quality of returns in a group of schools on high expenditure levels; the results showed no tapering off on educational returns as expenditure levels increased. Pierce (61) found that favorable community factors contribute to the quality of schools in a way that the expenditure of more money may never do.

Proctor and Dyer (63) found that, in general, the less money a state spends per capita for elementary and secondary education, the fewer outstanding scientists it is likely to produce. Bowyer (7) attempted to analyze the economic value of education to the states by measuring the economic return which states have derived from money expended on public schools. He concluded that the work of the schools had a causal bearing upon economic development, taking most effect within 10 or 12 years after the date of the school expenditure.

Foundation Program Costs

The cost of the foundation program proposed by the Florida Citizens Committee on Education (21) was determined by grouping elements of cost into four categories: instruction, transportation service, other current expenses, and capital outlay and debt service. Objective bases were developed for analyzing a fair allowance for each of these elements in a foundation program. Mort and Burke (48) reported that all analyses of the cost of a defensible foundation level have fallen short of the thinking of citizens on educational matters. According to Mort (47) the foundation level can operate automatically in line with economic factors affecting the cost of education with proper adjustment to price changes. Sargent (65) developed cost units designed to take differences of services into account. Additional references on foundation program costs appear in Chapter I of this issue of the REVIEW.

Comparable Units of Cost

The report of a public school survey in West Virginia (68) included a plan based upon population sparsity as a means of adjusting cost units to a basis of comparability among large administrative districts. The units thus equalized would be useful for financing a foundation program on any expenditure level. McLure (43) used this technic in developing methods of measuring the effect of population sparsity on school cost. In a study of intermediate districts in the state of New York (58) two improvements were proposed for the cost unit of educational need. First, it was proposed that the average daily attendance of any 125 days selected by the school district authorities be used instead of the total annual average daily attendance. Second, a method was developed to make adjustment for the character of dispersion of population. The contribution to the analysis of foundation program costs in this study was the distinction between cost of a basic school program that might be operated in constituent local districts and the cost of special services that might be provided to several constituent districts thru what was called the intermediate district. McLure (44, 45) developed methods of adjusting the cost unit (the pupil) for achieving an equalized foundation program among counties in Mississippi for three categories of school cost: operating expenses of the basic program, special services to be provided at the county level, and capital outlay and debt service requirements.

Three studies have considered analysis of a given foundation program for buildings expressed as a given cost per-weighted pupil (or per-weighted classroom) rather than a given cost per actual pupil. The first study was completed by the New York State School Boards Association (59) and included 85 reasonably comparable building projects. McLure (45) came to similar conclusions in analyzing the cost of 23 building projects in the state of Mississippi. Strevell (69) found that public school

enrolment, weighted for sparsity of population, produces a reliable cost unit for estimating the total cost of equitable foundation building needs among local districts.

A group of research workers (51), in conference on issues and research problems in school finance, placed emphasis upon the tendency to focus attention of the people on a broader conception of relationships between levels of cost allowances and the quality of education to be guaranteed all children. The cost unit of educational need was viewed as a dynamic phenomenon in moving toward an adequate program. Such a unit should be capable of automatic adjustment to account for cost variations over which local school administrative districts have no control—number of children, variations in number of children requiring transportation, necessary differences in average sizes of teaching groups, and cost of special features such as classes for handicapped children, adult education, and vocational education.

Higher Education

The President's Commission on Higher Education (72) recommended a vast expansion of the resources for higher education and proposed a substantial increase in the portion of the national income expended for higher education. Simpson (67) and Zook (77) appraised the Commission's findings, the former pointing out some weaknesses in the recommendations.

According to Hungate (36, 37) and Harris (23, 24) the pattern of financial support for higher education underwent a change during the last three decades. Collectively the shift from private to public support has been pronounced (30, 33, 56, 66). Chamberlain (15), Harris (25), Hoff (31), Kirchner (40), *The New York Times* (60), and Reck (64) pointed out that gifts, bequests, and endowment income for privately controlled institutions have proportionately declined while tuition and student fees increased both in publicly and privately controlled institutions. Harris (24) discovered that tuition increased more than the cost of living between 1913 and 1946 but declined relative to the output of goods and services. Henderson's study (27) indicated that tuition fees and living costs away from home are barriers to higher education for many able youth.

Altho there was an increase in the actual amount of gifts and bequests to privately controlled higher institutions as pointed out by Marts (42), the rate of return on investments declined according to Harris (24, 25) and Hungate (36, 37) which, combined with higher operating costs, forced the majority of these institutions to make drives for funds (60, 64). Marts (42) reported that gifts from corporations, a relatively new source of income, increased and are expected to increase in the future. Bell (6) proposed the establishment of regional agencies to receive and distribute

funds received from corporations. Trent (71) reported on an organization of 31 Negro colleges for cooperative solicitation of funds.

Partly because of larger enrolments after 1945, Reck's study of 124 colleges (64) indicated that expenditures increased 52 percent since 1941. Brown (8) pointed out that nonprofit higher institutions were facing financial difficulties because tuition covered less than 60 percent of the cost per student. Harris (25), Hoff (31), and Reck (64) discovered that salaries of faculty increased less since 1939 than other operating costs but more than costs for administration services. A recent survey by *The New York Times* (60) showed that approximately 20 percent of 648 higher institutions were operating with a deficit as of 1949.

Future Costs

Some estimates of future total expenditures for education were made for the nation by the American Association of School Administrators (2), Dewhurst (18), Linn (41), and the National Education Association (50). The majority of these estimates extend thru the middle 1950's or 1960, the period when public school enrolments are expected to reach an all-time high. In general the Architectural Record (3), Mort (46), Mort and Burke (48), and the Research Division of the National Education Association (54) expected unit costs to increase somewhat and the total cost to the nation to increase a great deal if only prewar standards are attained.

Bearing most heavily on future costs is the number of children and youth to be educated. A great many studies and reports were devoted to future school enrolments and their effects on the total costs of elementary, secondary, and higher education (14, 20, 22, 34, 41, 53, 57).

Wide variations exist in estimates of future costs for higher education, due largely to differing estimates of probable enrolment. The Report of the President's Commission (72) called for an annual expenditure of 3250 million dollars (1947 price level), including capital outlay in 1960 for public and private institutions combined for an estimated 4,600,000 students. This estimate was based on the assumption that all college age population of ability levels of those now in college will attend higher educational institutions. The Twentieth Century Fund Survey (18) estimated an "adequate" annual expenditure of 1435 million dollars (1940 price level) in the same year for 3,600,000 students (including capital outlay) for public and private institutions combined. Newburn (56) noted that increased funds must come from state and federal sources.

Increases in expenditures for educational and auxiliary services, particularly transportation, are expected for the future (2, 55). The number of children transported will undoubtedly increase under the influence of increased enrolment and reorganization of local school districts into larger units, according to studies made by Hutchins (38) and Wochner (75).

Teachers' salaries have lagged behind 1939-40 purchasing power and general wage increases, but were expected to increase slowly. Require-

ments for advanced training, the gradual elimination of teachers with emergency certificates, the upward movement of an increased number of teachers on state and local salary schedules, and the probable further reduction in the salary gap between elementary- and secondary-school teachers were expected by Burke (11) and the National Education Association (52) to increase instructional costs in the future.

Under pressure of anticipated increases in enrolment a great many studies and reports on future building needs and probable costs at all levels—national, state, local—were made (2, 9, 14, 20, 22, 41, 53, 73). Only a few can be specifically referred to here.

The American Association of School Administrators (1), Engelhardt (19), Exton (20), Linn (41), and Studenski and Baikie (70) reported that, in general, building unit costs (per pupil station, per cubic foot, etc.) increased two or three times over the 1940 costs. In recognition of the fact that specific estimates of future building and equipment costs are difficult to predict, almost all studies specified the year of the price level used.

In addition to the tremendously increased expenditures which will be required to provide buildings and equipment for a rapidly increasing school enrolment, certain trends in school building such as larger sites, functionally planned one- and two-story buildings, and modern fixtures and equipment were seen to increase unit costs of school construction (1, 3). On the other hand, the American Association of School Administrators (1) and the Architectural Record (3) reported that research and experimentation in lower cost design and construction are operating to reduce these same costs. On the whole, long needed rehabilitation and replacement of existing structures coupled with new demands were expected to result in very large capital outlays over the next decade or more (2, 9, 14, 18, 20, 22, 41, 53, 57, 73).

Hamon (22) and Linn (41) reported that the amounts required for school building construction for present and expected elementary- and secondary-school enrolments ranged from a conservative 6375 million dollars (1948 price level) thru 1958 to 7400 million dollars (1947 price level) for 1948 needs alone. Dewhurst (18) set the estimate of annual expenditures for school buildings for elementary and secondary education in 1960 for the nation at 708 million dollars (1940 price level) and the American Association of School Administrators (1) estimated the cost thru junior college education to be 1250 million dollars.

Brown and Jung (9) and the California Teachers Association (14) pointed out that the need for greatly increased school building facilities has presented many local school districts with demands for capital outlays quite beyond their fiscal ability and, as a consequence, state sources can be expected to bear an increasing share of school building costs in the future.

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CHAPTER IV

Budgeting, Accounting, Auditing, and Reporting

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THE publication strictly classifiable as research in the fields represented in this chapter are chiefly characterized by their scarcity. The author has now served as a committee member for five numbers of the REVIEW which have dealt with finance and business administration. The story has too often been the same, particularly with the topics here covered. This is regrettable, especially since a thoro canvass of literature in the areas of government and business does not indicate a greater fertility in these fields.

In the course of its inquiry, the chapter committee found and examined about 185 titles on subjects which might have yielded substance. The intention was to adhere to a fairly rigid research criterion. While the reviewing process moved the committee toward leniency in the face of paucity, the residue remaining in the bibliography represents the best that could be found. This could be said at any rate: the most difficult task of the group working on this particular assignment was to find a significant group of studies utilizing research methods and thus worthy of inclusion in the chapter. Where we have gone off "the gold standard," as has often been the case, the deflation may be regarded in part as being for the purpose of illuminating the status of things in these areas and, in part, for the purpose of including a few "insight" articles by persons who are known in research.

Among the most significant of the contributions encountered in this area is the investigation entitled *The Forty-Eight State School Systems* (12). The data assembled in this study are very valuable and useful and the work as a whole will, it is believed, prove stimulating of further research in this and other specialized areas.

Budgeting

Chase and Morphet in their study for the Council of State Governments (12) defined a school budget as "a financial plan which should be so developed as to provide as adequately as possible for educational needs." A good cross-section of informed educational thinking in this area was also set forth by Engelhardt and others (1, 3, 10, 13, 17, 24, 25, 33). During the past three years there has, however, been little or no basic research bearing directly upon the recognized phases of the budgetary process.

¹ With the assistance of George E. Flower, Albert G. Reilley, and Vincent P. Wright, graduate students, Harvard Graduate College of Education.

State Control. Altho the report on the forty-eight state school systems (12) found that most states require some form of school budget for all districts, in many cases only a superficial plan or system had been developed as a normative guide. McLure (26), on the other hand, found a very high degree of state control over the local budgets in Mississippi, especially in school districts receiving equalization funds. He went so far as to say that in such districts "the function that boards of education exercise in approving the budget is largely perfunctory." A slightly different type of centralized control was noted in New Mexico by Brewton (4). Here a county budget commission, composed of the state educational budget auditor and two resident taxpayers appointed by the county commissioners, reviewed local district budgets with the power to disallow individual items. Russell (31) for the American Council on Education pointed out the difficulties arising from inflexible state budgetary requirements pertaining specifically to public institutions of higher learning in Maryland. The case in point had to do with the compulsory projection of budgetary line items up to three years in advance. Cohen (11), using New York, New York, as a typical example, concluded that municipal-educational-state relationships could be simplified thru a better legislative framework.

Budgeting at the Local Level. In approximately two-thirds of the states, according to the study sponsored by the Council of State Governments (12), "the local school officials have full local responsibility for the preparation and adoption of school budgets." In the remaining third of the states, school budgets are subject to the approval of various other governmental bodies. Investigators Chase and Morphet also found that in many states there is no provision for public hearings on school budgets.

Kline (22, 23) determined that in certain Nebraska school districts budget practice fell far short of budget theory as formulated both by the school superintendents concerned and by authorities in school finance. One striking example of this discrepancy was that whereas 75 percent of the superintendents reported that they considered a statement of the educational plan the most important part of a budget, less than 3 percent of these same superintendents included such a plan in their own prepared document. From this study of budget estimates and actual expenditures, Kline (22) inferred that a more detailed approach to the preparation of budgets would decrease the margins of error.

After examining the budgets of three Eastern women's colleges for a ten-year period, Imlah (21) concluded on the basis of comparative per-pupil costs that budget orientation had leaned toward increased expenditure for plant and physical equipment in relation to expenditure for instructional services. This appears to be contrary to much undocumented experience of public school systems—an observation pointing to the need of inquiry. He also found that only two of the thirty-six budget documents examined were so arranged as to permit ready comparison of various income and expense categories with previous years.

Burke (7) declared that annual budgets may have a somewhat stagnating effect because they must of necessity balance an educational plan with available financial resources *for the year concerned*. He reiterated the often suggested advice that budgets include a "supplementary statement of present and future needs" over and beyond those provided for in the regular budget. Burke's concept has a parallel substantiation in the field of public finance as noted in Smithies' article (33). Therein is contained the request for an extraordinary budget to supplement the regular budget.

Accounting

Good (18) reviewed research and other studies in the area of school financial accounting and found very little significant work since the 1920's. He maintained: "This lack of attention . . . has led to a static condition in accounting systems over a period of almost two decades. This situation has prevailed in spite of the protests of many writers that present accounting systems are neither uniform nor adequate."

Uniform Systems of Accounting. Several accounting changes were recommended by the U. S. Office of Education in a revised version of Circular 204, *Financial Accounting for Public Schools* (35). Under Auxiliary Services a new subclassification was added for "Services to Schools Other Than Public," such as compulsory attendance enforcement and transportation. Expenditures for bond elections for new building purposes were to be considered as capital expenditures rather than charged to Administration (General Control). Sales of real property and valuable equipment other than that which is obsolete or junk were to be credited either to current nonrevenue receipts or to capital funds, depending upon whether they had been purchased from the one or the other.

Foster (16) traced the development of federal-state cooperation for improving school accounting over the past forty years. Along with Akerly (2) and Pulliam (30), he reported upon the appointment in 1948 and the continued functioning of the National Committee on the Cooperative Program on School Records and Reports. This committee was responsible for the revised Circular 204 (35) and is currently working on a new manual to replace it. A tentative outline of the proposed manual (36) retained the traditional widely used expenditure classifications, but also included separate sections on cost accounting and the subsidiary records and accounts needed in such fields as insurance, the school lunch program, and student funds. Recognition was also given to the varying needs of school systems at three different population levels: cities over 100,000, from 30,000 to 100,000, and under 30,000, with interest centered on those of 10,000 or less.

Good (18) developed a series of nine criteria for a sound uniform system of school financial accounting and then evaluated 14 state systems in the light of these criteria. He found general compliance with the principles of simplicity and convenience in use, but usually these were

achieved by sacrificing the adaptability and expansibility of accounting records and completeness of essential data. Items not adequately provided for included information concerning payroll deductions, self-supporting or partially self-supporting activities, and the value of property owned by the school district.

The Nevada State Department of Education (28) noted that despite supposed statewide uniformity, classifications of various expenditures varied so widely that it was virtually impossible to compute accurate state totals. The Michigan State Department of Public Instruction (27), in a proposed manual outlining a uniform accounting system, added a "Supplementary Disbursements" category to the standard expenditure classifications, to include such items as loans to revolving funds, payment of principal on short-term loans, and certain community services. The Illinois manual (20), a preliminary phase in the introduction of a uniform system, included a detailed "Alphabetical Classification of Expenditures" particularly for the use of part-time, inexperienced accountants in small school systems. Omitted from this classification were the items of supplies and equipment, the only items usually listed in such state guides, in hope that there would be further classification by the U. S. Office of Education.

Supplies and Equipment. The perennial problem of distinguishing between supplies and equipment led the U. S. Office of Education (35), in view of higher price levels, to raise its 1940 "rule of reason" to a recommendation that anything costing \$10 or more and having a life expectancy of more than ten years be regarded as an item of equipment. Michigan (27) set the dividing line at \$25 and a life expectancy of five years.

Auditing. Brewton (4) recommended in New Mexico that the state comptroller's office be made responsible for an annual audit of the financial records of local school districts and that the state assume the cost of such audit as a matter of economy and efficiency. The study conducted by the Council of State Governments (12) found that about half of the states have some plan for state auditing. The U. S. Office of Education (36) noted the need for greater attention to both external auditing and measures of internal audit control. Brighton (5) surveyed present practices and theories of reliance by auditors on the internal control measures of the enterprises which they audit. The Council of State Governments study (12) concluded that the chief function of an audit is to show whether all funds have been adequately accounted for. "At no time," authors Chase and Morphet said, "should the *judgment of auditors* regarding the desirability of an expenditure for educational purposes be substituted for the judgment of school officials. Such a procedure would tend to give auditors control of educational policies. Audits should show whether all funds have been properly accounted for, whether the district has exercised proper stewardship over its funds and whether any expenditures have been made in violation of specific provisions of law."²

² Italics added by reviewer.

Other studies in the area of accounting included one by Brown (6), who found that suitable payroll records could reduce the monthly payroll entry in the classified ledger to a single line; and File (14), who reported on a plan for handling student funds in the school's central treasury office in such a way that students might participate in a business situation. Finn (15) surveyed federal regulations and court interpretations on depreciation accounting largely from the viewpoint of corporation accounting, but she underlined the fact that the chief problem of depreciation accounting is that of assigning historical cost over successive fiscal periods so that it will be equitably prorated over the total service life of the equipment or building concerned.

Reporting

There appears to have been little thoro-going research during this period in the area of financial reporting. A number of desirable practices and technics have, however, been presented. A typical sample of public relations articles was presented in the *School Executive* (32). Grimes (19) reported that a monthly budget review for board members served the dual purpose of keeping those members informed financially and enabling them better to evaluate succeeding budgets as they were presented for adoption. Case (8) concluded that the increased cost of wider circulation of an informative annual report was money well spent. Postley (29) advanced the suggestion that professional writers be employed to aid in the translation of statistical tables into clear, concise, yet attractive statements for the lay public.

The U. S. Office of Education (35) stressed the fact that if a true picture of cost is to be given in financial reports, a school system should report on all items common to school systems, even where an item in a given system may be paid for by some other governmental unit: for example, heat or power provided by a municipal department. Brewton (4) found an immediate necessity for standardization and greater accuracy in reporting average daily attendance, especially where such is used as a basis for apportioning state aid.

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CHAPTER V

Problems of Business Administration

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IT HAS been observed that educational literature contains materials which deal largely with educational problems in terms of (a) what has been done, (b) what exists at the present time, and (c) what should be done. Review of the literature dealing with problems of school business administration during the period under consideration leads to the observation that there is practically none of the first category, a little of the second, and altogether too much of the third. If, in reviewing the literature, one abides by the definition of educational research, it must be said that the bulk of what has been published cannot be considered to fall within the accepted meaning of the term.² There appears to be an overwhelming abundance of materials describing the solution of a particular problem, in a particular place, by a particular method. Moreover, there is a full measure of those articles which suggest means and methods of how a certain problem should be dealt with, even tho the suggestions are made without benefit of extensive investigation or supporting evidence. Until those aspects of school business administration mentioned below are dealt with more objectively, improvement of school business administration will be delayed accordingly.

Debt Administration

The available literature contains increasingly frequent references to the inadequacies of our present methods of financing long-term capital improvement programs. Johns and Morphet (39) noted that high building costs, accumulated building needs, bond limitations, and a growing school population have the combined effect of creating a building need of from two to three times the ability of hundreds of school units to finance such needs. The authors argue that equalization of educational opportunities will be difficult to realize unless the states broaden their foundation programs to include state funds for capital outlay.

The Nevada School Finance Survey Group (55) pointed out that methods other than local bond issuance will have to be devised if the Nevada schools are to secure adequate capital improvement programs. The Council of State Governments (16), in describing provisions in the forty-eight states for financing school plant programs, listed twenty-nine states in which all or practically all financial support for school plant

¹ With the assistance of John R. Stinner.

² Research: ideally, the careful, unbiased investigation of a problem based in so far as possible upon demonstrable facts and involving refined distinctions, interpretations, and usually some generalization. Good, Carter V., editor. *Dictionary of Education*. New York: McGraw-Hill Book Company, 1945. p. 346.

construction must come from local sources, chiefly from the property tax. Nineteen states provide some state funds which may be used for school plant construction. This report also summarized state legal provisions existing in 1948 relative to the issuance of school bonds.

The 1949 Yearbook of the American Association of School Administrators (1) noted that the entire problem of financing thru borrowing has changed materially since the 1920's and discussed new approaches to the problem being made in providing state aid for capital outlay in some states. These plans include apportionment of state aid for capital outlay on an equalization basis, equalized matching formulas, state loan funds, accumulation of capital outlay funds from current levies in advance of construction, formation of local nonprofit corporations, and state public school building authorities.

In contrast to the foregoing studies, the chief purposes of which were to develop methods other than borrowing for capital improvement programs, several analyses have been made of procedures by which borrowing can be accomplished more effectively. Johns (38) suggested that financial services of state departments of education should include assistance to local school systems in the issuance and sale of bonds. In states requiring bond issues to be approved by a state reviewing agency, that agency should be the state department of education. Among the 77 school finance goals developed by the Research Division of the National Education Association (53), several pertain to the issuance of school bonds. These goals relate to the period of bond amortization, state approval of bond issues, callable bonds, and debt maturity schedules. Morphet (47) contended that the provision of adequate school buildings means a revision of many state limitations and restrictions so that bonding capacity may be related to actual valuation rather than assessed valuation and so that bonds can be voted when needed without unnecessary handicaps.

Castetter's study (13) analyzed the legal controls and the efficiency of local practices in 40 Pennsylvania school districts in the management of bonds as instruments of indebtedness. On the basis of 18 criteria for judging the educational, economic, and total welfare efficiency of local school bond practices, the study revealed that many unwise and expensive debt service conditions obtain in the smaller school districts, due to lack of comprehensive state controls over borrowing, failure to compel coordination of all local debts, insufficient guidance of local authorities by the state, statutory details which make for insufficient advertising of local bond issues, and ineffective total management of local school districts.

The Council of State Governments (17) concluded with respect to state-local relations that borrowing is an important source of local receipts and that present constitutional and statutory debt limits have many shortcomings. According to the report, loan receipts can be established in their rightful place in the local system thru three courses of action: (a) higher levels of government supporting local credit, (b) replacing current debt

limits by limits that are better measures of fiscal capacity, and (c) extending state supervision of the procedure, amounts, and purposes of local borrowing. Buehler (11) analyzed methods of repayment of loans, as well as problems posed by state and local borrowing. The fundamental principles upon which the improvement of debt control should be based were reviewed by the author. Lutz (45) reviewed state and local debt policies and problems and suggested that legislation governing local borrowing should deal with such matters as limitation of purpose, amount, maturity, proportion of improvement, method of redemption, and obligatory debt service taxation. In a similar vein, Jarvis (36) summarized the opinions of educational specialists concerning state controls which should govern bond issues used to finance school plant construction.

One of the laudable developments in the field of public school debt administration is the increased emphasis on long-range financial planning. Dotter (21) contended that the financial plans of many school districts are simply to spend their incomes. The author recommends that before bonds are issued, intensive study should be made of the social and economic factors which may affect long-term indebtedness. The need for capital improvement planning on a long-term basis is treated in a variety of sources, the most noteworthy of which are the publications of Furlong (25), the International City Managers' Association (32), the Municipal Finance Officers Association (49), and Roberts (61). In discussing the planning of financial aspects of the plant program, the American Council on Education report (2) urged wider capital outlay financing from current revenues and stressed the need for more state and federal financial assistance for the construction of public school facilities. Linen (43) discussed the marketing of state and municipal bonds in terms of the factors which affect marketability. Both money and price factors are analyzed, the objective of which is to indicate the bearing which money supply, tax exempt securities, supply and demand, bond ratings, taxing power and limitations, market trends, legality of bond issues, and public confidence have on the interest rates which a municipality must ultimately pay for its bonds. Sears (66) raised certain questions which must be dealt with by school districts in connection with the use of public credit and discussed briefly the social and economic implications of debt financing.

A number of useful articles, manuals, and textbooks have appeared in the literature dealing with practical technics of school debt administration. While none of these can be classified strictly as research, they represent the views and experiences of school administrators and financial specialists, as well as municipal and banking institutions interested in the improvement of debt administration. These materials should prove helpful to school administrators faced with the numerous problems involved in debt administration. The major factors to be dealt with by school and municipal officials in administering bond issues were taken up by Castetter (14), Ellinwood (23), the International City Managers' Association (32), Mul-

ford (48), the Municipal Finance Officers Association (50), and Tenner (68). These factors include long-term financial planning; debt maturity schedules; issuance, marketing, and service of bond issues; sinking fund administration; and legal aspects of bonding.

Chatters and Tenner (15) presented procedures employed in accounting for bonded debt, sinking fund administration, financial reporting, and amortization of bond discounts and premiums. Tenner's text (68) on municipal utilities contained a useful discussion of technics to be employed in registering bonds and interest, paying bonds and interest, filing cancelled bonds and coupons, and the selection of securities for investment. Hart (28), the Investment Bankers Association of America (35), and Prime (59) have developed mathematical procedures for determining bond yields. The latter reference is especially helpful in indicating the manner in which straight and split-rate bids on bond issues may be computed.

Both the practitioner and the student of finance may wish to refer occasionally to several important source books. These include the Bond Buyers' directory of municipal bond dealers and municipal bond attorneys in United States (8); the *Municipal Yearbook* (33), which reviewed trends in municipal finance; a textbook on the technic of municipal administration (34); *Moody's Manual of Investments* (46), an annual publication containing financial statistics and bond ratings of state and local units of government, including school districts; and a publication of the Educational Research Service (52) relating to methods which have proved successful in conducting campaigns for public support of school bond issues.

Transportation

The increasing importance of pupil transportation due to the redistricting that is now taking place in about a third of our states was pointed out by Butterworth (12), while Cyr and Darland (18) indicated the broadening scope of pupil transportation with increased use of school buses for class trips, field trips, and excursions.

Zimmerman (75) suggested that the study of pupil transportation costs can be approached in three ways: (a) comparing each unit in the district with "average practice" in the district, (b) measuring the need for transportation in terms of some factor such as density of population, and (c) a controlled-experiment method in two districts. Butterworth (12) stressed the need for comparable data in the study of pupil transportation costs, while Davis (19) urged standardization of components which go to make up pupil transportation costs. Stapley (67) found that the following factors affect the cost of pupil transportation: (a) size of unit, (b) routing, and (c) methods of operation. Similarly, Davis (19) listed the following as basic components which go to make up pupil transportation costs: (a) drivers wages, (b) operation and maintenance, (c) depreciation of buses,

(d) depreciation of garage and equipment, (e) insurance charges, (f) district's contribution to employees retirement, and (g) administration costs.

The question of state aid to the districts for pupil transportation has given rise to several proposals for reimbursement. Johns (37) proposed a formula for allotting state aid, based upon road conditions and number of riders per square mile. The value of the constants in the formula were calculated for Florida, but can be calculated for any state. Zimmerman (76) proposed a reasonable cost method for allotting state monies for pupil transportation in Maryland. The proposed scale to determine reasonable cost of pupil transportation was based upon seven items: (a) depreciation of cost of bus, (b) interest on initial cost of bus, (c) salary of drivers, (d) other fixed costs, (e) cost of oil, gas, lubrication, and anti-freeze, (f) cost of tires, and (g) cost of maintenance. Two plans for equalizing the cost of pupil transportation in California were presented. Gilles (27) proposed a plan for equalizing the costs of pupil transportation based upon reasonable cost of providing such service by means of district-owned buses, while Bryan (10) recommended a plan for equalization of state aid for pupil transportation based upon actual approved costs of providing such transportation in the district and the uniform effort in each district. Gilles (27) found that the cost of pupil transportation in California had risen more than average daily attendance or state apportionment for transportation.

The present legal status of transportation insurance in the various states was described by Booker and Remmlein (9). A further study by Remmlein (60) pointed to the need for legislative classification of the problem of liability for school accidents. Featherston (24) stated that national standards have been set up for school buses and that about three-fourths of the states have adopted these standards in whole or in part.

Cyr and Darland (18) stated that bus drivers are usually considered full-time employees, but work seventeen and one-half to twenty hours per week and they noted a trend toward employing part-time drivers, high-school students, and housewives. The establishment of driver standards as a state and local responsibility was emphasized by Belknap (7), who also stated that schools must make up for any lack of training or experience on the part of its school bus drivers. Stapley (67) concluded that selection, training and supervision of school bus drivers results in better transportation. The nationwide survey conducted by Rosenstengel and Swiers (64) revealed that the school business manager is responsible for the administration of pupil transportation in 43 percent of the districts.

Economies in pupil transportation have been given increased attention. Butterworth (12) stated that the meager evidence available pointed to the large district as most economical for pupil transportation. Stapley's study (67) in Indiana showed that district-owned buses were the most economical, that jointly owned buses were next in economy, and that privately

owned buses were least economical. Gilles (27) found that the unit cost in San Diego County, California, for 1945-46 were higher in districts which contracted with private carriers than in districts which operated their own buses. The trend toward the school district ownership of school buses was suggested by Zimmerman (75). Stapley (67) showed economies to be realized in school ownership of school bus garages. His study also indicated that shorter routes were the least economical. Robinson (62) emphasized the need for careful appraisal in laying out bus routes.

Purchasing and Supply

An editorial in the *American School Board Journal* (4) stressed the importance of the school purchasing agent and called for a man who is education-minded, has leadership and organization ability, and has the ability to develop policies and methods of buying that are adjusted to changing business conditions and public interest. The duties of the school business manager were portrayed by Rosenstengel and Swiers (64).

The question of who should make the selection of school purchases has received attention in the literature. George (26) suggested that a general committee of all school personnel be utilized to study supply and equipment needs. The *Nation's Schools* (54) reported that the methods used by various schools for buying perishable foods for school cafeteria were: (a) cost plus, (b) open competition, and (c) judgment of cafeteria managers. The *School Executive* (65) reported the results of a survey of superintendents to determine purchasing habits indicated that the user of supplies usually selected the supplies. Rosenstengel and Swiers' survey (64) of school business managers indicated that 82 percent of the business managers purchased all educational, operational, and maintenance equipment. The importance of centralized clearance of requisitions of supplies was stressed by Hunt and Clark (31), and Barbour (6) noted economies thru centralized buying.

The sources of specifications were pointed out by Holm (30), who listed the main types of specifications and the circumstances under which they can be used. George (26) suggested that schools utilize the information available for selection of materials by research laboratories of school supply companies and educational magazines. Rosenstengel and Swiers (64) found that 71 percent of the business managers surveyed made the specifications for all supplies and equipment.

Hunt and Clark (31) suggested the use of a supply-per-capita utilization budget and that educational equipment quotas be set up by the educational personnel. Barbour (6) indicated that larger administrative units appear to be more economical and described the following example: In 1948, North Carolina purchased 500 school buses thru the state purchasing commission for \$2650 each. These would have cost the individual districts \$3500 to \$4000 if bought individually.

A cooperative purchasing plan was reported by Kautz (41) in use in

the Cincinnati area where the board of education, city, county, and public library, and the University of Cincinnati coordinated their purchases. The benefits of the plan were: (a) monetary savings, (b) improved service to purchasers, (c) cooperation on the part of governmental purchasing agents to solve mutual problems, and (d) improved relationship with vendors due to standardization of forms and consultation on problems. Purchasing savings thru centralized authority, simplification, and standardization were suggested by Yerge (74). Murray and Holzapfel (51) stressed the importance of proper management of supplies and repairs thru (a) adequate personnel, (b) adequate and centralized storage, (c) scheduled delivery, (d) establishment of receiving and delivery points, and (e) constant repairs of school equipment.

Little (44) constructed a school supply purchasing practices score card which was originated for use in Kentucky but apparently could be used elsewhere. It is used for the rating of relative efficiency of performance of the purchasing function in the purchase of school supplies by individual districts. The score card has 15 weighted divisions. A checklist for each division was provided.

Insurance

Upton's study of fire insurance costs and practices in city-school districts (69) is an eight-year study (1938-1946) primarily of cities over 20,000 in the United States and Canada. The principal findings are: (a) Trend of fire insurance rates is downward. Rates are 12 percent less than 1930-31 on coverage 5 percent higher in 1938-1945. The most common cause for rate reduction was the reduction of fire hazards. (b) If companies had reduced rate by 40 percent during the eight-year period, 1938-1946, the loss ratio for city schools would have been the same as that for all risks in the country as a whole. (c) The trend is toward the use of a five-year term insurance policy. The blanket coverage of school property is most common and the use of co-insurance was almost universal. A method for developing an insurance form for a school district was also presented by Upton, and he developed a standard form for use in California school districts.

The increasing complexity of purchasing school insurance was pointed out by Joyner (40), who contended that it is no longer a simple task of ordering a policy from some local agent. He stated that the cost of replacement of school buildings has risen but questions if the fire insurance coverage has risen sufficiently. How to plan an insurance program was presented by Eichler (22). He emphasized the importance of an experienced insurance broker in the writing of policies, inspection of buildings, and in fire prevention. The survey of Rosenstengel and Swiers (64) has shown the importance of the school business manager in the appraisal of school buildings for insurance and in the purchase of insurance.

Booker and Remmlein (9) studied the present legal status of transpor-

tation insurance in the various states. Remmlein (60) called for the need for legislative clarification of problems of school transportation insurance. The trend toward making all government bodies liable for negligence was noted by Joyner (40). Rosenfield (63) discussed the question of statutory liability in relation to school accidents. The Educational Service Bureau of the University of Pennsylvania (57) conducted a statistical survey on transportation insurance in nine suburban Philadelphia school districts.

Personnel

A survey of school custodial personnel in the spring of 1946 in cities above 30,000 population was conducted by Phay (58). He found that the emoluments, rights, and privileges, of custodial personnel varied greatly. The typical custodian reported by this survey worked about forty-eight hours a week and received an annual salary of \$1950. This was an increase of \$300 over 1942-43. The typical custodian was not a union member and received less pay than did a union custodian. Phay (58) recommended that custodians be employed on an eight-hour day and forty-hour week and called for establishment of administrative policies concerning custodial personnel. The study indicated that custodial personnel practices must be improved to attract career custodians. A statistical study, similar to Phay's, of nine suburban Philadelphia school districts was conducted by the Educational Service Bureau of the University of Pennsylvania (56).

Knoll (42) reported on the nonteaching personnel practices in Long Beach, California, Public Schools, which call for high standards and provide good pay. Long Beach approached the salary study as a joint affair with a city-employed salary consultant. The nonteaching personnel in Long Beach preferred school organizations to labor unions.

With the conviction that poor custodial service is costly, Viles (70) recommended preservice training and inservice training. He presented a flexible program to meet the needs of training the custodial staff. Stapley (67) recommended a training program for school bus drivers as a method of providing better school transportation.

Rosenstengel and Swiers (64) surveyed the responsibilities, duties, training, and experience of the school business manager in cities of various population groups in the United States in 1947. Their data indicated that the position of school business managers is of such importance that professional work should be offered for training as business manager. The importance of school business personnel has also been stressed by other writers (4, 5).

Other Auxiliaries

Walls (71) reported that children are still not favored in securing dental appointments. Since the ratio of dentists to population is decreas-

ing, he suggests the use of chair assistants to increase the service of the dentist. A similar plan was reported by Holder (29) to be in use in Richmond, Indiana, in which dental assistants who had ten weeks training were utilized. Walls (71) also suggested the establishment of a school dental service similar to that found in New Zealand, in which graduate school dental nurses with three years training were utilized. The chief hindrance to such a plan was the lack of any state board to license such nurses.

Holder (29) gave a progress report on the Richmond, Indiana, pilot dental study. One of the functions of this study was to determine the annual dental care needs of school children on an annual increment basis.

The Astoria Plan of school medical service was evaluated by Yankauer (3, 73). This plan calls for continuity of record keeping and for a yearly conference with teacher and nurse in which the health of the pupil is reviewed. Yearly routine health examinations are eliminated. He reported that only minor, uncared-for physical defects were observed and that the Astoria Plan functioned satisfactorily in the schools surveyed.

Wayland (72) emphasized that school health is a function of all the schools and not of just the health departments. He stated that adequate funds were needed to support a good health program.

The Denver, Colorado, Study Committee of School Nurses (20) reported on a survey of nurses' salaries and conditions in thirty-eight cities over 100,000 in 1946. The report indicated a wide variation in salary, working conditions, and pupil load and slight variation in the educational requirements for school nurse.

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CHAPTER VI

Review of Developments

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CONTRIBUTORS to this REVIEW have observed, as have authors of earlier numbers, that not only is it difficult to locate literature which is strictly acceptable in terms of research criteria but it is also extremely difficult to exclude material which does not meet these same criteria. This committee has found it necessary to include the latter type items either because these writings provide the only sources of significance dealing with the problem under review or because of an unusual line of reasoning on the subject, in most cases from an authoritative source. These we may call marginal references in the field. It is unfortunate that research properly defined is so limited in this area that it is necessary to depend upon many of these marginal sources.

Marginal Research—Publication as Communication

There are other bibliographical items in this issue which may be classed in the marginal group. These are publications the chief purpose of which is *communication*. They are conceived not so much in terms of the substance reported, but in terms of the way it is reported and the audience which is to be reached. In this class would be included a number of publications of the National Education Association on subjects of finance. An example of popularized reporting, tho on a subject based on research, is the publication, *Still Unfinished—Our Educational Obligation to America's Children* (8).

During this period specially prepared popular digests have been released as supplements to basic surveys or commission reports. Examples are the digests written by the National Commission on the Reorganization of School Districts (7) and the Florida Citizens Committee on Education (2). Noting the frequency with which such types of publications appear, it would seem that this development, tho evidently dealing with a more or less marginal classification of research, marks the maturing of research in the field, at least in the sense that it is coming to be communicable to interested persons.

That research literature in finance and business administration is giving way to publications which will more appropriately broaden the base of professional and lay understanding of school fiscal problems is not altogether regrettable. It is, on the other hand, unfortunate that so little basic, fundamental, rigorous, scientific research has appeared during a period when the pressure of school finance problems has resulted in so many state surveys and other "action" publications.

Marginal Research—Engineering and Action

As the foregoing suggests, the period was characterized by an increase in the number of evidently high caliber statewide applications of research. Some of the state surveys emphasizing finance have been reported in this volume because of unique developments presented in them. From the standpoint of producing new ideas, new methods, new technics, and improved theory or understanding, these, for the most part, must also be classed as "marginal" items in a research review. That work in this area is becoming more and more action-oriented is to be viewed with favor from the standpoint that the vast engineering tasks in the improvement of educational finance and management need attention. Yet, again, this is not building a science, despite the advances in practice which it produces.

Data-gathering studies may be essential in action-oriented engineering programs on local, state, and national levels, but useful new generalizations which come from these studies are usually ancillary to the action objective. With reference to a specific legislature or action group, it may be important that facts be presented to show: (a) that more money is (or will be) needed for schools; (b) that some school districts (counties, states) have more financial ability (or spend more for schools) than others; (c) that property, the chief object of taxation in support of schools, is not equitably assessed and anyway cannot produce revenues needed in some areas; (d) that sources of support formerly of major significance (such as local taxes for public schools, endowments for private colleges) are not sufficient for the support of schools and must be supplemented by other revenue sources; or (e) that inefficiently organized districts (or schools) either fail to make possible good educational programs or are uneconomical. It is not, however, with ridicule that the writer points out that this slight exaggeration of what is necessary for action is melancholic prose to the researchist seeking new principles and new inspiration.

Research in the Most Literal Sense

Aside from the marginal items reported in this number and referred to above, there are two types of fundamental research which are covered in this REVIEW. One of these classes of study deals primarily with the development of *technic*, the other is directed toward *summarizing developments* in some broad or more or less delimited aspect of finance and business administration.

Examples of studies directly geared to the solution of old problems or to the solution of new ones by the development of new technics are those by Hungate (3), Lindman (5), McLure (6), Sargent (15), and Strevell (17). One of these is a frontal attack on the financing of higher education, another on financing capital outlay. Tho they may be classed as research studies in the most literal sense, they nevertheless deal with subjects of

immediate significance. While it is encouraging to note that more or less fundamental researches of this type have continued thru the three-year period covered by this number, some concern may be registered for what appears to be a much greater emphasis on other types of literature. This threat may disappear, however, if another observable trend continues, namely, the development of basic researches in conjunction with application or action studies. The West Virginia survey (16) and the studies in the state of New York (13) are illustrative of this development.

Comprehensive Inventories

It has been within only the past two decades or so ago that we have begun to have, thru the Research Division of the National Education Association and thru an intensive study, the National Survey of School Finance, a systematic stock-taking of theory and practice in the field of school finance. During the period reviewed in this number, several such reviews or recapitulations have been made. Many of these appear in connection with reviews by professional organizations of major educational problems. For instance, the yearbooks of the American Association of School Administrators which are devoted to such topics as school building construction contain sections summarizing contributions of the field of finance to the solution of such problems. Likewise, special commissions attacking a special problem—such as the Commission on the Reorganization of School Districts—analyze, review, or synthesize the financial aspects of the problem. This issue of the REVIEW of course, serves the same end. Occasionally, individuals, such as Quattlebaum (14), prepare a digest of arguments on an issue like federal aid. Several articles published by individuals have tended to summarize the status of thinking on several topics covered in this REVIEW. Perhaps one of the most needed types of research during a period of very rapid change in the nature of financial problems and ways of solving them is the descriptive reviews of the status of practice, such as those prepared by the Research Division of the National Education Association (10, 11, 12) and, recently, by the Council of State Governments (1). There is some evidence that students of these problems working on commissions, committees, and survey groups are attempting, along with factual description, to develop new understandings, new meanings, new perceptions. A direct attempt to examine the common set of understandings applicable to all states regarding state finance systems was the goal of the NEA Committee on Tax Education and School Finance (9).

Research and Engineering in the Balance

It is encouraging to see some of the ideas produced by research within the past quarter century becoming more widespread and more effectively used in bringing about improvements in practice. It is also hopeful to see fundamental research continuing in the field of finance and business admin-

istration. The improvement of practice is urgent, but so is basic research urgent, since the practitioner in many respects is still forced to make many arbitrary decisions in this field. The shortcomings of literature reviewed in this REVIEW seem to be on the basic research end. There is need for studies in scope and in perspective as comprehensive and as thoro as that by Johnson (4) which dealt with a much broader problem than educational finance. Glaring new problems seemed not to have had the attention of the researcher. It is surprising, for instance, that so little attention has been given to the problem of revenue for schools at a time when changes in our taxation and debt structure so obviously call for new perspectives. This seems particularly pertinent to this period during which so much has been written on how money should be spent and how badly more funds are needed.

On the credit side of the ledger are points, most of which have been noted by the NEA Committee on Tax Education and School Finance (9). The NEA Committee's conference report saw school finance problems coming to be tackled from a dynamic and a developmental point of view. The trend toward relating research to action is not new to the period covered by this REVIEW, but a number of research items covered in this number include directly or are intended to involve lay participation or make reference to the necessity of lay involvement in order to effect change. It seems reasonable to assume that as larger numbers of people become informed and participate in the study of school fiscal problems the demands upon research of all types in the field will be greater.

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